

DCS3101  
Assignment 4

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## **Abstract**

This is my submission for the fourth assignment in DCS3101, Introduction to Cybersecurity, fall 2020.

## **Q1**

### **Cybersecurity 101**

- Uses analogies to explain the history of the Internet
- Explains that the Internet was initially designed for a small number of large computers communicating
- The ease of communication on the Internet comes with a cost, and that is vulnerabilities in security
- Paints a picture of how impractical a truly secure network would be

### **Cyber Codes**

- Explains how codes are used all the time, because we communicate our messages in public
- Explains public key cryptography with analogies
- Explains what is encrypted and what is not, mentions that Email falls somewhere in between
- Explains how that almost every code ever crafted has been broken, and that the encryption mechanisms we use today, may have substantial flaws, waiting to be discovered

### **The Secret Lives of Hackers**

- Defines hacking as creative problem solving
- Many are driven by intellectual curiosity, some do ethical hacking, whilst others have malicious intents
- They may be very competent or may use tools they don't understand
- They may have ideal goals, and feel that their goal justifies their means

## A Cyber Privacy Parable

- Tell why we have to be careful about what we store online
- Shows that when uploading material to social media, the content may be copied by the government or a crime ring for identity theft
- Shows how social media may sell your data to advertising agencies
- Make sure to keep software up to date, and have good passwords

## Q2

The score after playing the game through, can be seen in the figure below:

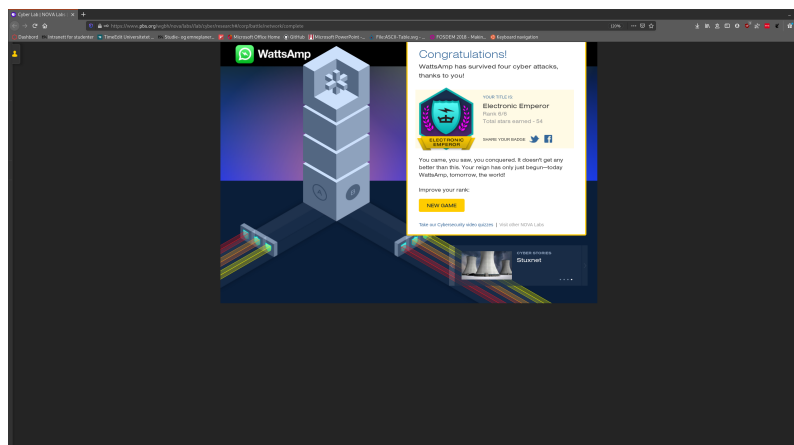


Figure 1: Score from game

I would say that the game is well crafted, and for kids this is a great resource for learning about computer science and cyber security. However, at the university level this is too simple, and I would say that the learning outcomes are extremely limited. Having said that, I must admit that I did have fun playing it.